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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,534	12/19/2003	Brett Rimmer	56.0719	1533
27452	7590	02/27/2006	EXAMINER	
SCHLUMBERGER TECHNOLOGY CORPORATION IP DEPT., WELL STIMULATION 110 SCHLUMBERGER DRIVE, MD1 SUGAR LAND, TX 77478			FIGUEROA, JOHN J	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/707,534	Applicant(s) RIMMER ET AL.	
	Examiner John J. Figueroa	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/20/04; 6/14/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Information Disclosure Statement

1. The supplemental information disclosure statement filed June 14, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document (namely, item B1: DD 263896); each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. In accordance with Applicant's communication of August 24, 2004, this reference has not been considered and has been crossed out by the Examiner on the corresponding PTO-1449, a copy of which is enclosed with this action.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The container is an essential feature(s) of the claims. The drawings on Figure 1-3 are apparently depicting a container but there is no indication of the container on the figures. (See e.g. paragraph [15] discussing the container shown as hanging in Fig. 1, but no indication of said container in Fig. 1 itself.) This feature should be depicted in the drawings or otherwise canceled from the claim(s). No new matter should be entered.

Moreover, the items of the drawings within the Figures should be indicated by reference numbers and not by terms or phrases.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant apparently is attempting to incorporate subject matter into this application by reference to WO99/36668, U.S. 5,893,416 and U.S. 5,964,291 on page 7 of the specification. However, this incorporation by reference is ineffective because the appropriate phrase is "*incorporated by reference*" and not "*included by reference*." Correction is required. (See, MPEP §608.01(p); 37 C.F.R. § 1.57)

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4. Claim 7 (and claims 9, 11-12 and 14 that depend therefrom) are objected to because of the following informalities: claim 7 recites: "the production tubing *is providing* with an anchoring means." It is unclear as to whether Applicant intends the phrase to be interpreted as "the production tubing *provides* an anchoring means" or, alternatively, "the production tubing *is provided with* an anchoring means." Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 3 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3, and claim 5 that depends therefrom, recites "wherein the container is located in the well bore by pumping it." It is not clear from the claims whether it is the container being pumped into the well bore or, alternatively, the well bore that is being pumped to locate the container. If the former is Applicant's intent, it would be unclear as to how a container could be pumped into a well bore and then be suspended to a hanger located in the production tubing as recited in claim 5.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 4, 7 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent Number (USPN) 4,790,386 to Johnson et al. (hereinafter 'Johnson').

Johnson discloses a method of delivering a treatment composition ("chemical") into a well bore containing corrosive fluids (path of production fluids), said method including providing a container ("basket") loaded with the treatment composition, lowering the container into the well's production tubing and exposing the treatment composition to the production fluids at one end of the container (opening); wherein the treatment composition is gradually released into the well bore at a desired rate.

(Abstract; col. 2, lines 38-51; col. 5, line 59 to col. 6, line 27; col. 6, lines 33-38) The treatment composition container can be lowered into place at, e.g., the bottom of a well bore, and thus directly into the production fluids, by a wire line (suspended to a hanger/anchor). (Figure 1; col. 3, lines 33-51 and 55-65)

Johnson also discloses that the treatment composition can be any chemical suitable for inhibiting scale, wax and/or corrosion of metal surfaces in the well bore. (Col. 4, lines 16-20) For example, the composition that is gradually introduced into the

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well can be a semi-solid composition, a polymer solution and/or an inhibitor; wherein said polymer solution can comprise an inhibitor and said inhibitor can be a polyacrylate, poly(meth)acrylate, polyacrylamide or alkaline salts of phosphate (includes organic and inorganic), phosphorate, acrylates (a carboxylate) or sulfonate. (Col. 4, lines 25-30; col. 6, lines 22-32)

Johnson further discloses that the top of the container can comprise an open-mesh screen if necessary to restrain the movement of the treatment composition from the top of the container. (Col. 5, lines 21-27; col. 6, lines 33-42)

The claims are anticipated by Johnson.

9. Claims 1, 4, 6-7 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 3,104,716 to Burkhardt et al. (hereinafter 'Burkhardt').

Burkhardt discloses a method for delivering into a well bore a treating liquid, such as a liquid corrosive inhibitor (chemical), at a low amount at a time from container 37 having inlet 40 (opening) from which said inhibitor can be ejected from container 37 into well bore 10; said well bore 10 comprising: production tubing 16 that extends to near the bottom of well bore 10, landing nipple 18 attached to production tubing 16, packer 22, cylindrical support 44 and extension tubing 20 (providing anchoring means for the container). (Col. 1, lines 23-45; col. 2, lines 1-13 and 18-24; col. 3, lines 51-62; Figures 1 and 5-6)

Burkhardt also discloses that extension tubing 20 (including the container) may be lowered by conventional means, such as a wire line attachable to fishing neck 26,

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and that the bottom of production tubing 16 is provided with plug 38 to form the reservoir of container 37 which encloses the corrosion inhibitor. (Col. 2, lines 14-17 and 34-38; col. 3, lines 51-54)

The claims are anticipated by Burkhardt.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burkhardt.

Burkhardt was discussed above in paragraph #9. Burkhardt does not provide examples of reusing the container to provide a chemical compound/composition into the well bore. However, Burkhardt provides no disclosure of the device being biodegradable or of the container's ineffectiveness after only one use.

Thus, it would have been obvious to one of ordinary skill in the oil drilling/well treatment art to reuse Burkhardt's sophisticated container/apparatus. One of ordinary skill in the art would have been motivated to do so because it would be cost-effective and efficient to reuse Burkhardt's container/apparatus to provide a chemical to a well bore than to purchase, and have deliver to the drilling site, a new container/apparatus each and every time a chemical is to be introduced into said well bore.

12. Claim 3 (and claim 5 that depends therefrom) are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of USPN 3,347,797 to Kuegemann et al. (hereinafter 'Kuegemann').

Johnson was discussed above in paragraph #8. Although Johnson does disclose the container suspended within the well's production tube (claim 5), Johnson does not additionally disclose delivering the container into the well bore by pumping the container or well bore (claim 3).

However, pumping a container or a chemical compound/composition into a well bore is a conventional means of delivering corrosion or scale inhibitors. (See, e.g., Kuegemann, col. 7, lines 33-36)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to pump the chemical/composition or container including the scale/corrosion inhibitor into the well bore's production tube. It would have been obvious to one skilled in the art to do so because pumping is a conventional means of delivering a container into a well as evidenced by Kuegemann.

13. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,604,185 to Hen, hereinafter ('Hen') in view of Burkhardt.

Hen discloses scale inhibitors that are capable of interacting with polyvalent metal ions in a well bore's production fluids, such as salt brines, and thus prevent and/or minimize the deposition of scale on reservoir, wellbore and equipment surfaces. (Col. 3, lines 1-8)

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Particularly, Hen discloses polycarboxylates and organic phosphate esters, such as phosphate esters of polyols and their salts and hydroxylamine phosphate esters, as a class of inhibitors that can be used to reduce deposition of scale in oilfield drilling practices. (Col. 3, lines 49-59; col. 11, line 43 to col. 12, line 2)

Burkhardt was discussed above in paragraph #9. Burkhardt does not specifically disclose the scale inhibitor to be an organic phosphate ester.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Burkhardt's method to deliver Hen's organic phosphate scale inhibitor into the production fluids of a well bore. The motivation to do so would be to effectively minimize the scaling/corrosion of the well bore production equipment/reservoir by the optimal delivery of the scale inhibitor over a gradual period of time as taught by Burkhardt.

14. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,387,986 B1 to Moradi-Araghi et al. (hereinafter 'Moradi') in view of Johnson.

Moradi teaches encapsulated crosslinking agents and gel-forming compositions to be utilized in oil-field applications. (Abstract; col. 2, lines 23-26) The preferred polymers taught by Moradi to be used for encapsulation are homopolymers and copolymers of glycolate and lactate, polycarbonates, polyanhydrides, polyorthoesters and polyphosphacenes; wherein the most preferred is poly(lactic acid-co-glycolic acid). (Col. 3, lines 12-17) According to Moradi, these polymers are preferable because they

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can degrade over a period of time to release the crosslinking agent at a selected gradual rate. (Col. 3, lines 7-10)

Johnson was discussed above in paragraphs #8. Johnson does not disclose the chemical compound/composition that is to be delivered from the container into the well to be encapsulated in a polymer. However, as discussed above, Johnson provides an effective method of gradually delivering a chemical compound or composition (chemical), such as a semi-solid or polymer composition, into a well bore at a desired rate of release of the chemical into the production fluid over a predetermined amount of time. (See, e.g. Johnson, col. 5, lines 28-43)

Accordingly, it would have been obvious to a person of ordinary skill in the art at the time the invention to use Johnson's method to deliver Moradi's encapsulated polymer composition into a well bore production tubing. It would have been obvious to one of ordinary skill in the art to do so to effectively reduce the scaling/corrosion of the well bore production equipment/reservoir by the optimal delivery of the encapsulated polymer over a gradual period of time as taught by Johnson.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

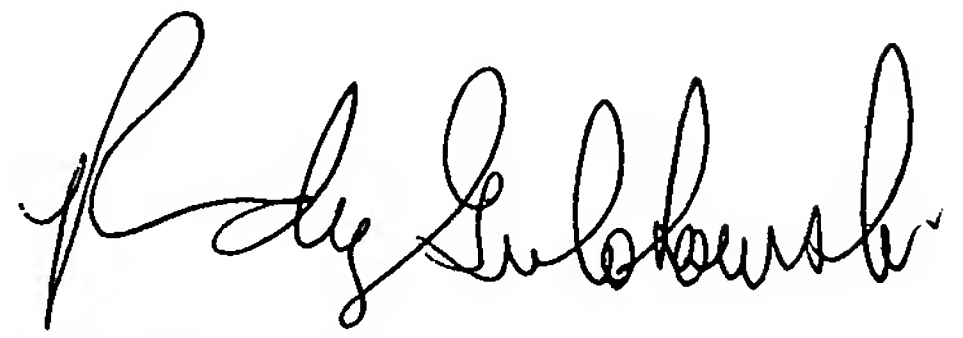
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Mon-Thurs & alt. Fri 8:00-5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJF/RAG



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